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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,631	11/20/2001	Kazuyuki Matsumoto	CU-2726 RJS	3149
26530	7590	03/23/2004	EXAMINER	
LADAS & PARRY 224 SOUTH MICHIGAN AVENUE, SUITE 1200 CHICAGO, IL 60604			TADESSE, YEWEBDAR T	
			ART UNIT	PAPER NUMBER
			1734	

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/989,631

Applicant(s)

MATSUMOTO, KAZUYUKI

Examiner

Yewebdar T Tadesse

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11/20/01
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 21-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02142002</u> . | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-20, drawn to a method for manufacturing a plurality of kinds of sheets, classified in class 264, subclass 1.36.
  - II. Claims 21-39, drawn to an apparatus for manufacturing a plurality of kinds of sheets, classified in class 425, subclass 135.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus can be used for manufacturing sheet having non-ionized compound layer or non-resin layer.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Brian Hameder on 02/13/2004 a provisional election was made without traverse to prosecute the invention of I, claims 1-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 21-39 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-3 are indefinite because in claims 1-3 the formation appears to be limited to the formation of the resin layer whereas the dependent claim 4 recites forming the sheet itself.

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***Claim Rejections - 35 USC § 102/103***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1, 5 9 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schubert et al (DE 19842510). Schubert et al discloses (see English translation Abstract) a process for production of functional surface coatings having substrate and UV curing layers comprising formation of ionization radiation curing type resin layer (polymer radical at the surface and in near surface layers from monomer/oligomer) while changing forming conditions based on

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preset values for each of the plurality of kinds of sheets (the formation of micro-imperfections on the surface is controlled by choice of processing parameters or conditions such as monomer/oligomer system, UV wavelength, substrate and coating technique). As to manufacturing a plurality of kinds of sheets, Schubert et al's method of production is capable of producing a plurality of sheets because in Schubert et al production is reproducible by replication of defined parameters. Furthermore, it would have been obvious to duplicate parts (each part performing defined parameters) for a multiplied effect. As to claim 5, in Schubert et al (see the Title) the formation can be conducted by utilizing a cover film for the sheet to be manufactured (applying layer of coating to the surface). As to claims 9 and 11, in Schubert et al the sheet (coated surface) is capable of being a lens sheet for a transmission type screen.

12. Claims 2-3, 5, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schubert et al (DE 19842510) in view of Ballestrazzi et al (US 5,238,120). Schubert et al is cited for the same reasons discussed above. Schubert et al teaches controlling processing parameters by choice to form product having required technical property and replication of defined parameters to reproduce products or UV curing paint-coated surface (formation of radiation type curing layer). However the use of a sensor identifying the kind of sheet (coated surface) to be manufactured and changing forming conditions based on both of preset values (parameters controlled by choice) and results of the identifying step are not taught in Schubert et al. Nevertheless, the use of sensors in combination with a computer or CPU is well known

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in the art to recognize or signal the types or kinds of products manufactured, as a result the computer execute the desired processing commands. For instance, Ballestrazzi et al discloses identifying sensors (48 and 49) with a computer 14 to classify the manufactured products. It would have been obvious at the time the invention was made to include the use of a sensor to identify the kind of sheet (coated surface) manufactured in communication with a central processor in Schubert et al to perform a fully automated system resulting efficient production. As to changing formation conditions based on both preset values and results of the identifying step, in manufacturing environment it is known for the operators to use preset operational parameters in combination with the automated or sensed identifying step to reduce the number operation steps conducted. It would be obvious to implement forming conditions based on both of preset values and results of the identifying step in Schubert et al to use the preset values as default parameters as desired minimizing the production time by eliminating unnecessary steps of setting processing conditions. As to claim 5, in Schubert et al (see the Title) the formation can be conducted by utilizing a cover film for the sheet to be manufactured (applying layer of coating to the surface). As to claims 9 and 11, in Schubert et al the sheet (coated surface) is capable of being a lens sheet for a transmission type screen.



***Allowable Subject Matter***

13. Claims 4, 6-8, 10 and 12-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

14. Claims 4, 6-8, 10 and 12-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter: As to claims 4, 6, 10, 12 and 15-16, prior art of record does not disclose or suggest a method for manufacturing a plurality of kinds of sheets comprising, among others, wherein the formation is conducted by utilizing a forming mold for at least one kind of sheets to be manufactured. As to claims 7-8, 13-14, 17-20, prior art of record does not disclose or suggest a method for manufacturing a plurality of kinds of sheets comprising, among others, in which the formation is conducted by utilizing a cover film for at least one kind of sheets to be manufactured and wherein the formation is conducted by carrying out the steps of; applying ionizing radiation curing type resin in a form of liquid on the substrate, placing a cover film on the uncured resin body to flatten the uncured resin body and irradiating the uncured resin layer through the pressure sheet to cure the uncured resin layer.

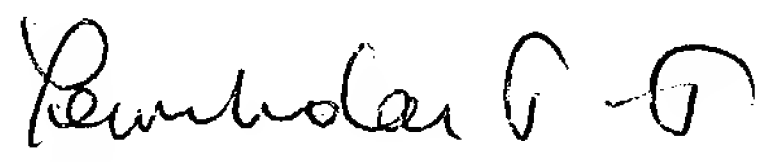



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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yewebdar T Tadesse whose telephone number is (571) 272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM-4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
YTT

  
MICHAEL COLAIANNI  
PRIMARY EXAMINER